Assessment Forest Plan Revision

Final Existing Designated Areas Report

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for:

Custer Gallatin National Forest

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Introduction

A draft of this report was released for public review on November 30, 2016 and feedback was requested by January 6, 2017. Changes made to the final report based on public feedback were to add information about the potential need or opportunity for additional designated areas.

Milestone legislation was established by Congress in the 1960s to create a system of designated areas that included, in part, the National Wilderness Preservation System, National Wild and Scenic Rivers, and the National Trails System. These designated areas established a national system of connected conservation areas providing for the enduring resource of wilderness, protecting rivers, and preserving scenic and significant natural, historic, and cultural resources along national scenic and historic trails.

Specially designated areas include congressionally designated wildernesses; Montana Wilderness Study Act areas; Cabin Creek Wildlife and Recreation Management Area, eligible wild and scenic rivers; national recreation, scenic, and historic trails and national natural landmarks. The plan area also encompasses recommended wilderness and inventoried roadless areas, research natural areas, special interest areas, Beartooth National Scenic Highway and All-American Road, the Quake Lake Interpretive Center, and the Pryor Mountain Wild Horse Territory. For more information refer to Research Natural Areas and Special Interest Areas report (Reid 2017b) and the Pryor Mountain Wild Horse Territory report (Reid 2017a). The figures below show all of the designated areas on the Custer Gallatin National Forest.

In addition to the specially designated areas found within the Custer Gallatin National Forest, there are areas specially designated by other agencies that surround the Custer Gallatin on neighboring national forests, parks, and BLM and State lands. These areas add recreation values, scenic values, wildlife opportunities, and other resources values and complement those of the national forest.

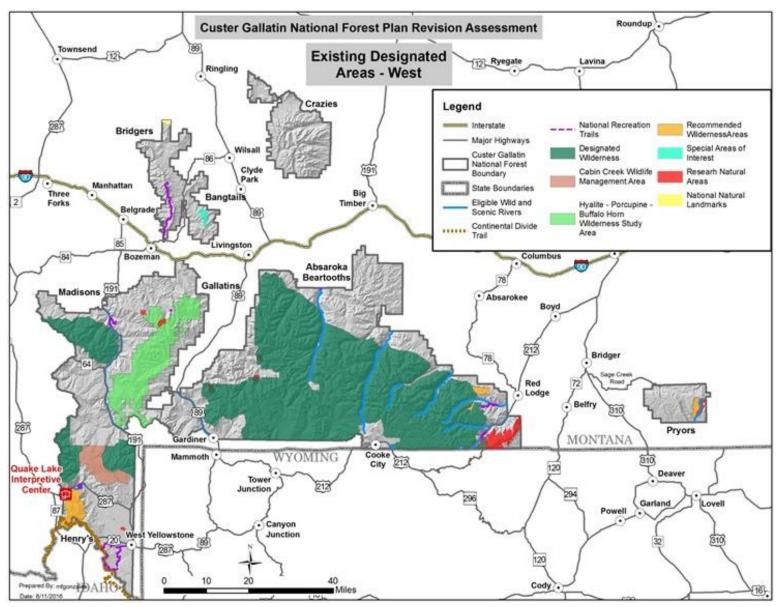


Figure 1. Existing designated areas on the Custer Gallatin National Forest, west side

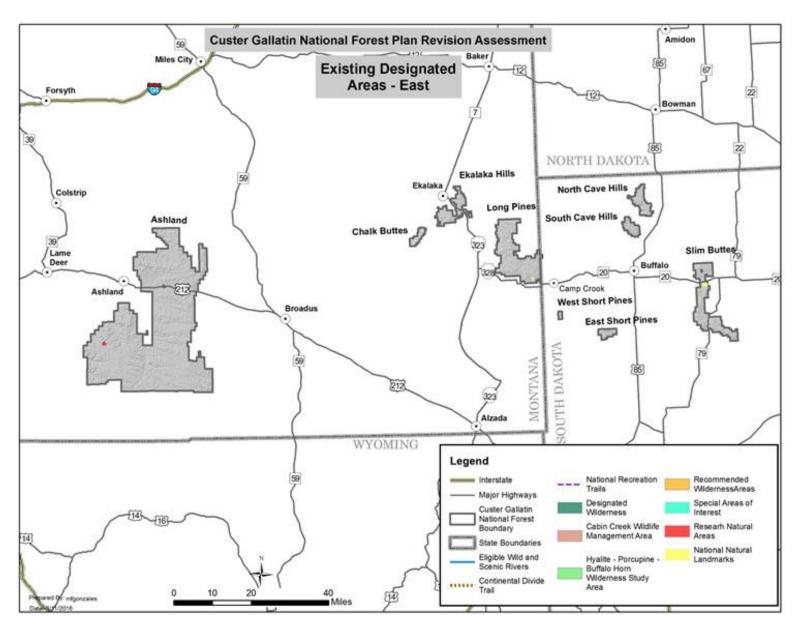


Figure 2. Existing designated areas on the Custer Gallatin National Forest, east side

Potential Need or Opportunity for Future Designations

The Custer Gallatin National Forest has a large percentage of its land represented in one of the designated area types. Wilderness, wilderness study areas, and inventoried roadless areas alone represent 65 percent of the national forest. Eligible wild and scenic rivers, national natural landmarks, and other areas contribute additional acres of designation. Within the types of designations there is a wide range of levels of protection, recreation opportunity, community connection, geography ecological conditions, scenery, and special features.

Potential need or opportunity for future designations has not been thoroughly evaluated by the interdisciplinary team although individual specialist reports address connectivity, habitat distribution, recreation trends, climate change, and other specific trends relevant to areas for additional designation.

Within Federal lands, it is widely recognized that the least amount of human manipulation and the highest degree of land use restriction (found in designated wilderness) is often located at higher elevations, this is generally true of the Custer Gallatin National Forest. The Absaroka Beartooth Wilderness Area includes many of the tallest peaks on the Custer Gallatin National Forest, plus high lake plateaus, and a good portion of alpine and subalpine habitats in the Absaroka and Beartooth Mountains. Likewise, the Lee Metcalf Wilderness Area includes the highest mountains in the Madison Range, plus associated alpine and subalpine habitat. Other designated areas (inventoried roadless and wilderness study areas, recommended wilderness for example) are also largely represented in the higher elevations, where steeper, more rugged terrain often limits road access and associated management actions.

The Wildlife Specialist report (Dixon et al, 2017) explores protected areas in the context of habitat distribution and wildlife connectivity across the Custer Gallatin and the Greater Yellowstone Area. On the Custer Gallatin, all of the designated wilderness is located in the Montane Ecosystem, which puts roughly 38 percent of the Montane Ecosystem in this category. An additional 30 percent of the Montane Ecosystem is in designations such as inventoried roadless areas, recommended wilderness or wilderness study area, leaving about 32 percent of the Montane Ecosystem widely available for multiple-use management. The Montane Ecosystem of the Custer Gallatin National Forest is on par with the Greater Yellowstone Area for proportion of "protected areas" that contribute to wildlife habitat connectivity. In contrast to the Montane Ecosystem, none of the Pine Savanna Ecosystem of the Custer Gallatin National Forest is currently in designated wilderness. A large percentage of the Pine Savanna Ecosystem has been subject to more human manipulation and is available for a wider range of land management activities, while a smaller acreage is within inventoried roadless areas or research natural areas. The opportunity to assess the need for additional protection for habitat or connectivity will be considered through the interdisciplinary planning process.

The Recreation Specialist report (Oswald, 2017) discusses increased visitation on the Forest and indicates existing and anticipated changes in activity participation on public lands in Montana. The Custer Gallatin experiences high visitation, the vast majority of which is in the Montane Ecosystem and a large percentage within some type of designated area. A wide range of available opportunities, settings, and development scales are both desired and utilized by the recreating public. National Recreation, Historic and Scenic Trails, and the Beartooth Scenic Byway are a few examples of areas in addition to wilderness that highlight the unique role of recreation on the Forest. The opportunity to provide emphasis for the purposes of sustainable recreation opportunities and settings will be considered during the interdisciplinary planning process.

The Research Natural Areas and Special Interest Areas specialist report (Reid, 2017) discusses the potential need and opportunity for additional research natural areas. Most of the targeted plant communities identified during the development of the 1986 forest plans have been filled through applicable NEPA analyses and decisions. Additional areas representing later recommended additions to the regional research natural area targets would be evaluated during the life of the revised plan.

The eligible Wild and Scenic Rivers process and the wilderness inventory and evaluation are critical steps in framing this conversation. The development of desired conditions will also play a very informative role in understanding the potential need or opportunities for additional designations.

Forest stakeholders have a wide variety of perspectives on the need or potential for additional designated areas. While some members of the public would like to see additional designations, others have expressed the need to reconsider existing designations and perhaps reduce the levels of protection. Known areas for robust public conversation specifically include, but are not limited to, Hyalite Canyon, the HPBH WSA, the Pryor Mountains and existing recommended wilderness areas including Lionhead.

Process and Methods

The Custer Gallatin National Forest used the best available data and science relevant to the plan area and management to inform the assessment of designated areas where available. Quality data was used in this assessment and the studies and reports that were used are of accepted and standardized scientific methodology and are replicable. In compiling this assessment many major sources of information were reviewed and information incorporated. References included in this assessment reflect the most relevant documents, given the scope and scale of the assessment, and determined to be best available scientific information.

Much of the data on designated areas used for this assessment comes from direction provided through public law, Executive orders and rules, and from Forest Service sources such as the infrastructure database (called INFRA). Database information and GIS mapping tools enable the Custer Gallatin National Forest to manage and report accurate information about their inventory of constructed features and land units.

For congressionally designated areas, in particular GIS acres and legislated acres, are not always the same. In many cases GIS acres more accurately reflect conditions on the ground; historically some acreage calculations were based on relatively basic hand drawings and calculations because mapping tools were less sophisticated at that time. In this report, when discussing an individual area, the source of the acreage information will be referenced. Other resource reports may rely solely on GIS acreage for consistency purposes with other management designations.

Scale

Information on most designated areas is presented at two geographic scales: Custer Gallatin-wide and by individual designated area or resource type. The Custer Gallatin-wide scale provides information on relevant public laws, Forest Service process and policy, and overall direction for the designated area. Information by resource is more detailed and allows a reader interested in a specific area to find more area-specific information.

Existing Information Sources

Existing information for existing designated areas come primarily from Forest Service databases and documents as well as enabling legislation. Examples include:

- The Wilderness Act of 1964 (Public Law 88-577), the Lee Metcalf Wilderness Act (Public Law 98-140), Absaroka-Beartooth Wilderness Act (Public Law 95-249), and the Montana Wilderness Study Act of 1977 (Public Law 95-150)
- The National Trails System Act (Public Law 90-543)
- The National Natural Landmarks program
- 2001 Roadless Area Conservation Rule
- The Beartooth Highway Comprehensive Road Corridor Management Plan
- The 1986 and 1987 Custer and Gallatin Forest Plans and respective final environmental impact statements.

Congressionally Designated Wilderness, Wilderness Study Area, Cabin Creek Wildlife and Recreation Area

Introduction

The Wilderness Act of 1964 (Public Law 88-577) set up a system of wilderness areas across the United States and defined wilderness as a place "in contrast with those areas where man and his own works dominate the landscape... where earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain... an area of undeveloped federal lands retaining its primeval character and influences, without permanent improvements or human habitation, which is protected and managed to preserve its natural condition". Nationally, the Forest Service oversees 193 million acres of national forest and grasslands, of which nearly 37 million acres and approximately 19 percent are wilderness.

The Custer Gallatin National Forest manages significant portions of the Absaroka-Beartooth and Lee Metcalf Wilderness Areas. Designated wilderness accounts for approximately 1,061,343 acres and nearly 35 percent of the Custer Gallatin National Forest.

Current Forest Plan Direction

Direction for the management of designated wilderness can be found in the 1964 Wilderness Act, and subsequent area-specific legislation, Forest Service Handbook and Manual 2320, and in the two forest plans. The Gallatin National Forest had been delegated as lead national forest by the Regional Forester for the Absaroka-Beartooth and Lee Metcalf Wilderness Areas. The Gallatin Forest Plan (USDA Forest Service 1987) directed wilderness managers to update wilderness management direction for managing opportunities for solitude and primitive/unconfined recreation opportunities in wilderness. The Custer Forest Plan incorporated similar language and referenced the Gallatin Forest Plan.

Per Gallatin National Forest Plan, Appendix F Wilderness Management Plan, allotment management plans for allotments in wilderness areas will specifically identify: the use of motor vehicles, motorized equipment, or other forms of mechanical equipment; range improvement structures and installations to

be maintained, constructed, or reconstructed in achieving range management objectives, including maintenance standards; the means to handle emergencies; and the grazing system to be followed.

The draft wilderness management plans (1986) have not been revised as a comprehensive management plan to date. Elements of wilderness management have been imbedded in other Custer Gallatin-level planning efforts. The Gallatin Travel Plan spoke to trail based recreation and opportunity. The Gallatin Fire amendment incorporated language for the management of wildland fire in the wilderness. The Gallatin Forest-wide Weeds Environmental Impact Statement speaks to the management of weeds with the wilderness.

Forest-level management direction for the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area in the Gallatin Forest Plan and the travel plan reiterate the need to manage the area consistent with the Montana Wilderness Study Act of 1977 which specified that, "subject to existing private rights, the wilderness study areas designated by this Act shall, until Congress determines otherwise, be administered by the Secretary of Agriculture so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System" (Public Law 95-150). Forest-level management direction for the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area can be found in the Gallatin Forest Plan, Gallatin-wide standards, the travel plan, and two management areas which reiterate the need to manage the area consistent with the Montana Wilderness Study Act.

Gallatin Forest Plan direction for the Cabin Creek Wildlife and Recreation Area directs managers to manage the area consistent with the legislation for the purposes of recreation, grizzly bears, and big game. The 2006 Gallatin Travel Plan decision allowed broad use of the Cabin Creek area by several different types of recreation users, such as retrieving animals killed during hunting season on motor bikes or snowmobiles.

Existing Condition

Designated Wilderness

Absaroka-Beartooth Wilderness

Congress designated the Absaroka-Beartooth Wilderness Area in 1978 (Public Law 95-249). It encompasses a total of 943,626 acres. The Montana portion contains 920,343 acres on the Custer Gallatin National Forests. The Wyoming portion contains 23,283 acres located on the Shoshone National Forest.

Active glaciers, sweeping tundra plateaus (one of the largest expanses of tundra habitat over 10,000 feet in elevation in the lower 48 states), deep canyons, sparkling streams, and hundreds of alpine lakes combine to make this one of the most outstanding wilderness areas in America. Granite Peak, the tallest peak in Montana, towers at 12,799 feet in the middle of the Absaroka-Beartooth Wilderness.

The Absaroka Mountains (named after the Crow Indians, Apsalooka) have ample vegetative cover, including dense forests and broad mountain meadows crossed by meandering streams. Bighorn sheep and mountain goats roam about the mostly rugged country, along with elk, deer, moose, marmots, coyotes, black bears, wolves and a substantial grizzly bear population. The harsher Beartooths (named for the resemblance of a bear's tooth to some of the craggy peaks) are characterized by rocks and ice. Fewer animals roam these rocky highlands. Trout reside in many of the lakes and streams in both ranges.

With over 700 miles of trail, the Absaroka-Beartooth Wilderness is a hiking, backpacking, and equestrian haven. Hiking and backpacking are more popular in the Beartooths, while traditional stock supported pack trips and hunting adventures are more common in the Absaroka portion. The nearly 1 million acres of wilderness provide ample opportunities for primitive unconfined recreation and solitude. Many portions of the area have no trails and rarely traveled. All motorized or mechanized recreation activities are prohibited in wilderness.

There are approximately 33 outfitter and guides operating under special-use authorizations in the Absaroka-Beartooth Wilderness on the Custer Gallatin National Forest. These 33 companies provide publically available services that range from hiking, or fishing, to excursion-style, stock-supported hunting trips. The range of infrastructure is from nothing to larger more elaborate base camps that rely on food storage infrastructure, toilet facilities, corrals, and kitchen set ups. There are approximately 44 designated camps for outfitter and guide use in the Absaroka-Beartooth Wilderness. These permitted outfitter/guide camps are either base or spike camps for overnight stock operations. Progressive backpack camp locations, drop camps, climbing, and mountaineering camps are not included.

Lee Metcalf Wilderness

Congress passed the Lee Metcalf Wilderness bill in 1983, designating a total of 254,288 acres. The entire wilderness is in the State of Montana, on the Custer Gallatin and Beaverhead-Deerlodge National Forests, and the Bureau of Land Management (BLM).

This wilderness consists of four separate units in the Madison Range. Landscapes vary from a huddle of high peaks rising above 10,000 feet and subalpine meadows, to the arid river corridor in Bear Trap Canyon managed by the BLM. The BLM manages all 6,000 acres of the Bear Trap Canyon Unit, a stretch of wild canyon country along the Madison River. This was the first designated wilderness on BLM land.

The 30,000 acre Monument Mountain Unit lies on the northwest boundary of Yellowstone National Park. It is an isolated area lightly visited by humans, but rich in wildlife, including a robust population of grizzly bears.

The 78,000 acre Spanish Peaks Unit encompasses steeply rugged, glaciated peaks rising more than 11,000 feet above scenic circuity and gem-like lakes. This heavily used area, a favorite of local and regional visitors, hosts a well-developed trail system and many popular destinations.

At about 141,000 acres, the Taylor-Hilgard Unit is the largest. It runs along the crest of the Madison Range, with several peaks exceeding 11,000 feet above the Hilgard Basin. High mountain meadows and lakes are surrounded by snowcapped summits. This unit is jointly managed by the Custer Gallatin and Beaverhead-Deerlodge National Forests.

There are approximately 140 miles of trail within the wilderness units with additional trails linking these four units. Deer, elk, moose, mountain lions, mountain goats, black bears, wolves and grizzly bears abound. The lakes and streams are home to several species of trout including cutthroat, grayling, rainbow, and brook. Day hiking, backpacking, horseback riding, and hunting and fishing are the most popular recreation activities.

There are approximately 14 outfitter and guides operating under special-use authorizations in the Lee Metcalf Wilderness on the Custer Gallatin National Forest. These 14 companies provide publically available services that range from day use hiking, or fishing, to excursion style stock supported hunting trips. There are approximately 24 designated camps for outfitter and guide use in the Lee Metcalf

Wilderness. These permitted outfitter/guide camps are either base or spike camps for overnight stock operations. Progressive backpack camp locations, drop camps, climbing, and mountaineering camps are not included.

Visitor Use in Wilderness on the Custer Gallatin National Forest

The National Visitor Use Monitoring program is used across the entire national forest system, and every 5 years, each national forest monitors their use through exit surveys. The monitoring data displayed below is for designated wilderness on the Custer Gallatin and cannot be disaggregated by individual wilderness area or subunit. The Custer portions of the national forest were surveyed most recently in 2008 and 2013, the Gallatin portion of the Forest was surveyed in 2009 and 2014.

Table 1 shows the number and percentage of visits to the wilderness areas within the Custer Gallatin National Forest. More men (about 58 percent) visit designated wilderness on the Custer Gallatin than women (42 percent) and the largest age group visiting wilderness is 20 to 29 years old (nearly 30 percent) with an additional 45 percent of wilderness visitors distributed relatively evenly between the three 30 to 59 age groups. Detailed discussion about national visitor use monitoring and visitor trends are included in the Recreation Settings, Opportunities and Access report (Oswald 2017) (National Visitor Use Monitoring 2013, 2014).

Table 1. Total forest visits, forest visits within designated wilderness, and percent of use within designated wilderness

Years	Total Forest Visits	Visits within Designated Wilderness	Visits in Designated Wilderness (percent)
2013, 2014	3,100,000	440,000	15%
2008, 2009	1,900,000	201,000	11%

Grazing

Nine allotments lie partially within wilderness areas on the Custer Gallatin. One active allotment is within the Lee Metcalf and eight allotments are within the Absaroka-Beartooth Wilderness Area. Minor infrastructure associated with the management of these allotments include fences, water lines, and water tanks. Rangeland and wilderness managers coordinate on access, repair, or ongoing management needs such as signage, gate issues, and weed treatments.

Wilderness Study Area

The Custer Gallatin manages one congressionally designated wilderness study area, the 155,000-acre Hyalite-Porcupine-Buffalo Horn Wilderness Study Area. This area is located in the core of the Gallatin Range, running north to Hyalite Canyon and south to the Yellowstone National Park boundary. This wilderness study area is approximately 36 miles long by 4 to 12 miles wide.

The Montana Wilderness Study Act of 1977 (Public Law 95-150) created eight wilderness study areas in Montana, including the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, for review by the agency for their suitability for preservation as wilderness. The Montana Wilderness Study Act of 1977 specified that, "subject to existing private rights, the wilderness study areas designated by this Act shall, until Congress determines otherwise, be administered by the Secretary of Agriculture so as to maintain their presently existing wilderness character and potential for inclusion in the National Wilderness Preservation System" (Public Law 95-150).

Unlike designated wilderness, however, wilderness study areas may still permit some activities and uses that are precluded from designated wilderness (as long as these activities do not degrade wilderness character as it is known to have existed in 1977, per the Montana Wilderness Study Act of 1977).

In the early 1980s, the Forest Service studied the suitability of the area for inclusion in the wilderness preservation system, and recommended that it not be designated wilderness at that time. The checkerboard ownership pattern was largely responsible for the conclusion that the area was unsuitable for wilderness designation. Since then, nearly 37,000 acres of private land have been acquired as national forest within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area boundary.

The Hyalite-Porcupine-Buffalo Horn Wilderness Study Area's topography is highly variable. The northern portion of the study area contains jagged peaks, U-shaped valleys, and cirque basins. A more moderate topography is found in the remainder of the wilderness study area. Elevations range from approximately 5,500 feet to over 10,300 feet. The City of Bozeman is dependent on the Bozeman and Hyalite drainages for municipal water, and the headwaters of both are partially contained within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area.

The Hyalite-Porcupine-Buffalo Horn Wilderness Study Area supports diverse vegetation communities. At the lowest elevations grasslands are found, which then transition into Douglas-fir (*Pseudotsuga menziesii*) and/or limber pine (*Pinus flexilis*) stands. At higher elevations, lodgepole pine (*Pinus contorta*), spruce, and subalpine forests are found. The highest elevations contain whitebark pine (*Pinus albicaulis*) and, beyond the timberline, alpine tundra or alpine turf. Forested portions of the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area are affected by mountain pine beetle epidemics, dwarf mistletoe, spruce budworm, and white pine blister rust. Riparian areas within the wilderness study area support wetland vegetation and are influenced by high soil moisture. These areas are highly productive and provide protection against erosional forces.

The variety of habitats within this wilderness study area provide for a wide range of wildlife species. Important species found here include bighorn sheep (*Ovis canadensis*), Rocky Mountain elk (*Cervus canadensis*), grizzly bear (*Ursus arctos horribilis*), moose (*Alces alces*), wolverine (*Gulo gulo*), Arctic grayling (*Thymallus arcticus*), westslope cutthroat trout (*Oncorhynchus clarkia lewisi*), Yellowstone cutthroat trout (*Oncorhynchus clarkia bouvieri*), and whitebark pine.

In 1977, approximately 50,000 to 56,000 acres within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area were privately owned. These private lands were arranged in a checkerboard pattern across the wilderness study area. Since then, the Forest Service has acquired over 37,000 acres of this private land, most of these previously owned by Burlington Northern Railroad and, subsequently, their timber subsidiary, Plum Creek Timber, Inc. The acquisition of these lands increased the number of public access points from 9 to 16 trailheads (Schlenker 2003, 2012).

The 1985 Hyalite-Porcupine-Buffalo Horn Wilderness Study Report indicated that visitor uses primarily included hiking, camping, hunting, snowmobiling, motorcycle riding, horseback riding, collecting specimens from the Gallatin Petrified Forest, and cross-country skiing (USDA Forest Service 1985). Big game hunting, trout and grayling fishing, and activities provided by outfitters, guides, and dude ranches were also popular. By 2003, Hyalite-Porcupine-Buffalo Horn Wilderness Study Area recreation uses had shifted, mirroring changes seen elsewhere on the Gallatin National Forest and in the Northern Rockies. Combined with population increases in Gallatin and Park Counties, this shift resulted in notable increases in mountain biking, motorcycle and ATV use, snowmobiling, and ice climbing (Schlenker 2003, 2012).

There have been a number of other significant changes in Hyalite-Porcupine-Buffalo Horn Wilderness Study Area use, rights, and facilities since 1977. There are no remaining active hard rock or leasable mineral claims, in comparison to the 24,342 acres of leases and claims present in 1977. Permitted livestock grazing has been reduced. Two range allotments have been waived back to the Forest Service and one has been rested since the Fridley Fire in 2001. Across active allotments the number of permitted livestock has been reduced. Only two of three cabins present in 1977 remain. Snow survey sites have been reduced from four to two. No new trails have been constructed; only reconstruction or reroutes of failed existing trails have occurred and 1.5 miles of road was converted to trail via a restoration project. Six miles of road in the West Pine drainage were recontoured and reseeded. Many old logging roads have grown-in with trees and ground cover, although satellite imagery (in about 2003) showed 34 miles of remaining, visible old road within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area.

Prior to 1977, timber harvest, associated road construction, and subsequent stand improvement activities took place on over 2,100 acres of private land within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area boundary (Schlenker 2012).

Timber harvest had also occurred on approximately 400 acres of Federal land prior to 1971. These harvest activities were responsible for the construction of most of the roads that existed within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area at the time. Since 1977, timber management activities within the study area have all been associated with private land or restoration work on recently acquired land. All of these activities occurred on a total of 242 acres along the periphery of the wilderness study area.

A number of management issues have subsided since 1977, while new issues have arisen. The acquisition of private land within the wilderness study area has largely mitigated complications caused by the checkerboard pattern of land ownership present at the time of wilderness study area establishment. Timber harvesting activities and associated road construction has largely ceased. Management must now address the growing presence and impacts of invasive species, as well as an increased number of threatened and endangered animal and plant species. New forms of recreation also have been introduced, with mountain biking and ice climbing, in particular, growing in popularity in the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area (Schlenker 2003, 2012).

Since its establishment in 1977, the wilderness study area's management and potential future designation as wilderness has been controversial. Discussion has often focused on management and use of motorized vehicles within the wilderness study area, and has resulted in a series of court and litigation actions. In 1996, the Montana Wilderness Association initiated legislation over Forest Service Management of wilderness study areas across Montana, citing loss of historic wilderness character due to increased motorized recreation and lack of appropriate management actions by the Agency. This lawsuit specifically cited the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area and concerns about Gallatin National Forest management actions. The litigation was settled in 2001 and resulted in the Forest Service's agreement to conduct travel management planning for all wilderness study areas.

In 2006, the Gallatin National Forest published its Record of Decision for the Final Travel Management Plan. The Decision established summer and winter travel management direction across the entire Gallatin Forest, including the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area. This Decision received 113 appeals in 2007 and was subsequently upheld by the Regional Forester. In response, Citizens for Balanced Use filed suit on the Travel Plan in its entirety, and the Montana Wilderness Association, Greater Yellowstone Coalition, and The Wilderness Society challenged the wilderness study

area's management direction. All complaints were joined and addressed in District Court. The court ruled on these complaints in September 2009, upholding the Travel Plan Decision in all areas other than the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area. Within the wilderness study area, the travel decision was enjoined, and in its place the Gallatin National Forest implemented interim summer and winter travel orders further restricting mechanized and motorized travel therein. This winter interim order was promptly challenged in District Court by Citizens for Balanced Use. Shortly after the 2009 District Court ruling, the Forest Service and Citizens for Balanced Use appealed the District Court Decision to the 9th Circuit Court.

In December 2011, the 9th Circuit Court ruled that the 2006 Travel Plan Decision within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area did not adequately protect wilderness character. On June 25, 2012, District Court Judge Haddon found that CBU's subsequent suit had been "squarely resolved" by the 9th decision in the case of Russell Country Sportsmen v. United States Forest Service and granted the defendants motion for summary judgment.

In 2013, the Gallatin Community Collaborative held its first meeting to establish a community driven working group to work toward a broad, adaptive, and durable resolution of the long history of issues concerning the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area. The goal of the Collaborative was to develop management recommendations and a consensus-based proposal to the Agency that would provide long-term benefits for Gallatin Range communities and citizens. The Community collaborative recently submitted a final report after nearly 4 years of collaborative and community work. The final report included broad considerations and documented the collaborative process; it did not, however, make specific management proposals.

Cabin Creek Recreation and Wildlife Management Area

The Cabin Creek Recreation and Wildlife Management Area was designated by the Lee Metcalf Wilderness Act in 1983. Public law 98-140, October 31, 1983, established the Cabin Creek area for the purpose of wildlife and recreation. The 36,752-acre area encompasses Upper Wapiti Creek, Carrot Basin, and Cabin Creek. It is entirely within occupied grizzly bear habitat and contains important big game habitat.

The legislation placed emphasis on the recreation and wildlife values of the area. At the same time, the bill recognized the historical uses of the area. Specific management direction for areas was decided through the national forest planning process. It was decided that the travel direction for the area was key, especially the use of motorized vehicles. The 2006 Gallatin Travel Plan decision allowed broad use of the Cabin Creek area by several different types of recreation users. It allows the uses that people have been used to such as retrieving animals killed during hunting season on motor bikes or snowmobiles.

Key Benefits to People

Designated areas provide ecological, geological, scientific, educational, scenic, and historical values. The role of designated areas are important in protecting air quality, water quality, wildlife habitat, unique wild plant and animal species, and provide a unique legacy to future generations. Designated areas provide scenic beauty of wild landscapes, the knowledge that wilderness is being protected (existence value), the choice to visit wilderness at some future time (option value), the opportunity for wilderness recreation experiences, preserving nature for scientific study, and spiritual inspiration.

Benefits of wilderness include outstanding opportunities for solitude or a primitive and unconfined type of recreation. Wilderness serves as a classroom for experiential learning where one learns about

biology, ecology, or geology directly through observation of and interaction with wilderness features and systems.

Designated areas provide recreation, challenge, quality of life, adventure, and scenery. Across cultures and history, people have also attached symbolic values to wilderness. Some may see wild places as emblematic of other values they cherish, such as freedom and opportunity, or of nature in general.

See also the Recreation Settings, Opportunities and Access report (Oswald 2017) and the Terrestrial Wildlife report (Dixon et al. 2017).

Trends and Drivers

Monitoring has been conducted on the Custer Gallatin since the early 1990s. Data collection for the purposes of better articulating and maintaining wilderness character has been robust. Collection has focused on presence/absence of structures, campsite conditions, encounters monitoring, and natural quality indicators such as weeds and wildlife.

Outside influences on designated areas have changed since the areas were designated in 1978 and 1983. In the nearly 40 years since designation there have been changes in population, ownership patterns, climate, vegetation, fire, and society. Improvements in technology alone have made backcountry recreation, including wilderness, more accessible to the average citizen. Human influences such as recreation in some key areas has dramatically increased, challenging managers to consider how to best manage heavy use. Restrictions on number of outfitter and guide operations, horses, camping, camp fires, and group sizes are all being employed as methods to maintain wilderness quality and opportunity for solitude.

Influences on the natural qualities and processes in juxtaposition with challenges and opportunities associated with climate change, native species restoration, critical wildlife refugia, and fire management create tension between management action and the purposes of wilderness.

A Forest Service initiative, the "Chief's 10 Year Wilderness Stewardship Challenge", began in 2004 and was intended to improve the stewardship of wilderness by 2014. Areas of focus included: the role of fire, nonnative and invasive plants, air quality, solitude and unconfined recreation, data inventory, outfitter-guide management, national forest planning direction, workforce and outreach/education metrics.

At the conclusion of the 10 Year Challenge, the 2020 Vision, "Interagency Stewardship Priorities for Americas National Wilderness Preservation System" was initiated. The purpose of the 2020 vision is to set interagency goals, objectives, and actions to guide collaborative stewardship of the National Wilderness Preservations System. There are three major themes that emerged: protecting wilderness resources, connecting people to their wilderness heritage, and foster excellence in wilderness leadership and coordination. In 2015, each Forest choose criteria to measure progress towards meeting wilderness stewardship goals and priorities. The Custer Gallatin National Forest is measuring and reporting on the role of fire, invasive species, opportunities for solitude, infrastructure, outfitter and guides. These criteria among others will set a wilderness character baseline that will help prioritize our management in the Absaroka-Beartooth and Lee Metcalf Wilderness Areas.

See also the Recreation Settings, Opportunities and Access report (Oswald 2017) and the Terrestrial Wildlife report (Dixon et al. 2017) for additional trends and drivers.

Information Needs

Analysis of draft opportunity classes and completion of the "limits of acceptable change" efforts are ongoing. This programmatic look at wilderness on the Custer Gallatin National Forest is needed to help inform the interdisciplinary team and develop meaningful management direction in the forest plan.

Commercial use within the wilderness is limited by legislation and direction to outfitting and guiding. Since designation, the public need and demand for services has evolved. The Custer Gallatin is currently looking at this program and an analysis of commercial services in wilderness is necessary to inform the interdisciplinary team to develop management alternatives.

New direction is expected directing national forests how to complete wilderness character monitoring. It is unknown how that direction will interface with ongoing monitoring or what gaps it may identify in existing data.

Key Findings

- Accounting for nearly 35 percent of the Custer Gallatin National Forest, designated wilderness is a large part of the Custer Gallatin land mass and niche.
- Education and stewardship are critical to the successful management of wilderness.
- Large parts of the Absaroka-Beartooth and Lee Metcalf Wilderness Areas provide important refugia and habitat for a large number of plant, wildlife, and fish species.
- The 1986 plans referenced interim wilderness plans for the Absaroka-Beartooth and Lee Metcalf Wilderness Areas. The direction in the interim plans for the Absaroka-Beartooth and Lee Metcalf Wilderness Areas was never finalized and does not meet the current minimum content or need for wilderness managers.
- Use of the wilderness for recreational purposes is trending upward. Crowding has the ability to effect opportunities for unconfined recreation and solitude in some areas.
- Management of natural resources within wilderness has effects on the untrammeled nature of the natural qualities within wilderness. This creates management challenge, opportunity, and tension.
- Since the first congressional hearings in 1975 proposing the Hyalite-Porcupine-Buffalo Horn
 Wilderness Study Area, management of this area has been controversial. Undoubtedly,
 controversy will remain until a new land allocation decision is made. A number of Gallatin
 National Forest actions taken since 1977, however, have improved or restored wilderness
 character in the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, including the acquisition
 of private land, reduction in number of developments, and the enactment and revision of travel
 plans.
- Wilderness Study Act areas are considered to be "large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions" and will be evaluated in the wilderness inventory process that will be completed during the forest plan revision.

See also the Recreation Settings, Opportunities and Access report (Oswald 2017).

Inventoried Roadless Areas

Introduction

The 3 million-acre Custer Gallatin National Forest has a large component of roadless and unroaded land. An inventory of roadless lands has been maintained since the early 1970s. The current inventory was displayed most recently in the 2001 Roadless Final Rule (36 CFR 294) (USDA Forest Service 2001). Table 2 summarizes the roadless inventory acres. The following maps display the current roadless inventory of the Custer Gallatin.

The original inventory of roadless lands took place in the early 1970s during the RARE (Roadless Area Evaluation and Review) I evaluations, and then again in the late 1970s during RARE II. The inventory displayed in the current forest plan environmental impact statements are an output of the RARE II inventory. Approximately 30 separate inventoried roadless areas, located across the Custer Gallatin but predominantly in the montane units, were identified through this process. Complete descriptions of each individual roadless area can be found in appendix C of the Gallatin Forest Plan Final Environmental Impact Statement (USDA Forest Service 1987) and appendix C of the Custer Forest Plan Final Environmental Impact Statement (USDA Forest Service 1986).

The total inventoried roadless acres (Table 2) (847, 420) is the acreage shown in the Roadless Final Rule Final Environmental Impact Statement (USDA Forest Service 2001). Discrepancies in total roadless acreage shown in the forest plan and figures displayed in the roadless final rule are primarily due to mapping conventions (the old, hand-drawn maps versus GIS mapping used for the final rule), and private lands acquired within roadless areas since 1987. The inventory lines themselves have not been changed since the forest plans were published.

An integral part of forest plan revision is to establish an updated inventory and evaluation of potential areas that could be recommended for inclusion in the National Wilderness Preservation System. Many of the desirable characteristics when considering the opportunity to designate additional wilderness, such as large blocks of undeveloped natural landscapes with undisturbed ecosystem conditions, will be considered during the wilderness inventory.

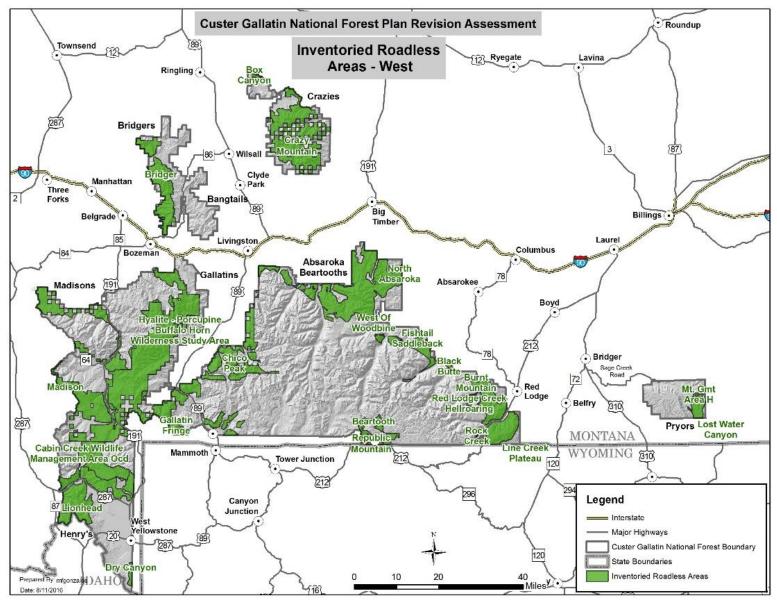


Figure 3. Current roadless inventory on the Custer Gallatin National Forest, west side

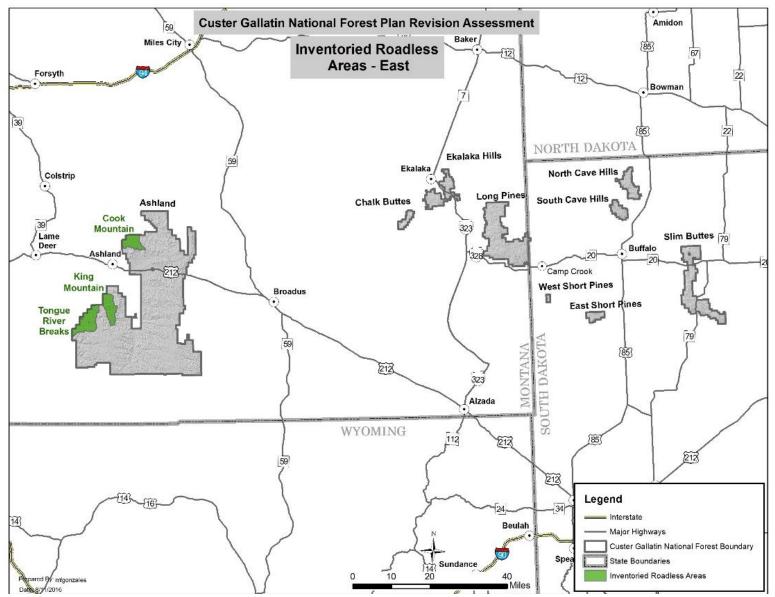


Figure 4. Current roadless inventory on the Custer Gallatin National Forest, east side

Current Forest Plan Direction

During the analysis for the 1986 and 1987 Custer and Gallatin forest plans, all inventoried roadless areas were reviewed and alternatives considered whether to recommend these areas for designation as wilderness. This review was originally mandated by the RARE I and then RARE II (Roadless Area Evaluation and Review) processes, and modified yet again by direction contained in the National Forest Management Act and subsequent planning regulations tied to it (36 CFR 219.17). The results of that roadless review can be found in the Gallatin Forest Plan Final Environmental Impact Statement, appendix C (USDA Forest Service 1987) and Custer Forest Plan Final Environmental Impact Statement, appendix C (USDA Forest Service 1986). Areas recommended for wilderness designation will be discussed in the later "Forest Plan Recommended Wilderness" section.

The Lee Metcalf Wilderness Act (Public Law 98-140) included "soft release" language, which dropped the portions of the Madison Inventoried Roadless Area (1-549) and Tongue River Breaks Inventoried Roadless Area that were not designated as wilderness from consideration as such through the national forest planning process in the late 1980s. As a result, the evaluation for those inventoried roadless areas were not included in those forest plans.

Both the Custer and Gallatin forest plans provide management direction in a variety of management areas that are also included in the inventoried roadless areas. Specific management direction has been established for inventoried roadless areas under the 2001 Roadless Area Conservation Rule (USDA Forest Service 2001; 36 CFR Part 294). This rule, also known as, the "2001 Roadless Rule" provides management direction and a framework activities proposed with the areas boundaries (36 CFR 294 subpart B {66 FR 3244} January 12, 2001). All inventoried roadless area boundaries and acreages within the Custer Gallatin National Forest were established as a part of the 2001 Roadless Rule and cannot be modified in a forest plan revision effort.

Existing Condition

Approximately 847,420 acres are within inventoried roadless areas within the plan area. These areas constitute approximately 30 percent of the entire lands administered by the Custer Gallatin National Forest. Table 2 identifies each inventoried roadless area and its location within the plan area.

Table 2. Inventoried roadless areas and locations

Roadless/Wilderness Study Area Name by Landscape Area	Total GIS Acres
Madison, Henry, Gallatin, Absaroka and Beartooth Mountains	
Beartooth	6,403
Black Butte	864
Burnt Mountain	10,691
Cabin Creek Wildlife Management Area	35,045
Chico Peak	10,744
Dry Canyon	3,242
Fishtail Saddleback	16,348
Gallatin Fringe	51,441
Hyalite-Porcupine-Buffalo Horn Wilderness Study Area	143,965
Line Creek Plateau	24,812
Lionhead	33,535
Madison	127,739
Management Area H	718
North Absaroka	179,979
Line Creek	389
Red Lodge Creek Hellroaring	17,197
Reef	2,481
Republic Mountain	827
Rock Creek	100
West of Woodbine	1,903
Total	668,422
Bridger, Bangtails, Crazy Mountains	
Bridger	44,965
Box Canyon	2,290
Crazy Mountain	82,088
Total	129,343
Pryor Mountains	
Lost Water Canyon	9,248
Lost Water Canyon RNA	561
Management Area H	611
Total	10,421
Ashland	
Cook Mountain	9,620
King Mountain	12,134
Tongue River Breaks	17,480
Total	39,234
Sioux	
No inventoried roadless areas	0
Grand Total	847,420

Key Benefits to People

The large acreage of roadless public lands in the Greater Yellowstone Area, including those on the Custer Gallatin Forest, hold special values for many individuals. This large expanse of wild land is home to large carnivores, pure water, native fisheries, several threatened or endangered species, outstanding primitive recreation opportunities, exemplary scenery and numerous unique geologic, historic and cultural features. This combination of attributes and empty spaces create a rare and unique setting in a world where ever-increasing urbanization, population increases, and modification of the natural environment are more the norm. Many people have expressed their feeling that maintaining the integrity of these wild lands is important to them, even if they may never have an opportunity to experience them first hand.

Trends and Drivers

See the "Forest Plan Recommended Wilderness" section of this report, and the Recreation Settings, Opportunities and Access report (Oswald 2017).

Information Needs

There are no existing information needs identified.

Key Findings

Many of the designated areas are within inventories roadless areas. Many of the Custer Gallatin's research natural areas, recommended wilderness, the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, national recreation trails, and eligible wild and scenic areas are within inventoried roadless.

Forest Plan Recommended Wilderness and Eligible Wild and Scenic Rivers

Introduction

The national forest planning regulations require that each national forest conduct a thorough examination of its lands for potential inclusion in the National Wilderness Preservation System and for rivers that are potentially eligible for wild and scenic rivers designation.

Current Forest Plan Direction

The 1987 Gallatin Forest Plan recommended that 22,000 additional acres in the Lionhead and Republic units be added to the National Wilderness Preservation System. The 1986 Custer Forest Plan recommended 6,800 additional acres in the Pryors, and 5,700 additional acres in five separate areas abutting the Absaroka-Beartooth and west of Red Lodge. Table 3 shows the breakout of these areas (from the Roadless Final Rule 2001). Discrepancies between the acres of recommended wilderness shown in the forest plans and the Roadless Rule are primarily due to map errors between the old, hand-drawn maps from the forest plan and GIS maps produced for the Roadless Final Rule. Both forest plans provided direction to manage recommended wilderness to protect the wilderness characteristics and to allow existing uses pending congressional action on their classification.

There are currently no designated wild and scenic rivers on the Custer Gallatin although both forest plans identified a list of eligible wild and scenic rivers and provided management direction to protect their outstandingly remarkable values per FSH 1909.12.

Existing Condition

Hell Roaring

Line Creek Plateau

Lost Water Canyon

Forest Plan Recommended Wilderness

The 1986 and 1987 Custer and Gallatin Forest Plans included approximately 35,850 acres of "recommended wilderness", with the majority of the acres located on the Gallatin near the Idaho border. Recommended wilderness accounts for approximately 1 percent of the Custer Gallatin. This designation is considered a preliminary administrative recommendation that is intended to receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. While some of these areas, and other locations on the Custer Gallatin, have been carried forward in proposed wilderness bills, neither the President nor Congress have acted to designate any of the recommended areas as wilderness.

The recommendations were developed after a thorough evaluation of inventoried roadless areas based on wilderness characteristics, manageability, resource values, need for wilderness, and how it would contribute to the National Wilderness Preservation System.

Name	General Location	Designating Document	Forest Plan Acres
Lionhead	Near West Yellowstone, Montana	Gallatin Forest Plan, 1987	22,800
Republic Mountain	Near Cooke City, Montana	Gallatin Forest Plan, 1987	480
Mystic	Near Mystic Lake	Custer Forest Plan, 1986	250
Burnt Mountain	West of Red Lodge	Custer Forest Plan, 1986	3,900
Red Lodge Creek	West of Red Lodge	Custer Forest Plan, 1986	800

Custer Forest Plan, 1986

Custer Forest Plan, 1986

800

6,800

Table 3. Forest plan recommended wilderness areas

West of Red Lodge

Pryor Mountains

The Lionhead Recommended Wilderness addition straddles the Continental Divide along the Idaho/Montana border. The roadless (and recommended wilderness addition) portion of this area extends into Idaho on the Targhee National Forest. The Gallatin Forest Plan (USDA Forest Service 1987) recommended adding 22,800 acres of the 32,780-acre roadless unit (Gallatin portion) to wilderness.

Land types and vegetation are varied in the Lionhead Recommended Wilderness, ranging from heavy timber to open grassy slopes. Bare rock land, talus, and mountain grasslands dominate higher elevations from 9,000 to 10,311 feet. Scenic mountain vistas and high elevation grasslands along the Continental Divide dominate the area. Trails in the Mile Creek, Sheep Creek, Watkins Creek, and Coffin Creek drainages access several cirque basins and small lakes.

The Republic Mountain Recommended Wilderness addition is located immediately south of Cooke City, Montana, and borders the North Absaroka Wilderness to the south on the Shoshone National Forest and Yellowstone National Park to the east. This is a rugged area with no trails that is steep with numerous talus slopes, ravines, and spur ridges. It retains a high degree of natural integrity, with the exception of some old mine workings along the northeast boundary. The area receives light use, mostly hiking, hunting, and some backcountry skiing in the winter. The record of decision for the Gallatin Forest Plan identifies that 480 acres of this 700-acre roadless area were recommended as wilderness.

The North Absaroka Wilderness Recommended Wilderness includes the remaining four areas recommended for wilderness classification that lie within proximity to or adjacent to the Absaroka-Beartooth Wilderness. Their recommendation for inclusion into the wilderness system was to refine the boundary of the Absaroka-Beartooth Wilderness for better administration and public identification. These areas individually did not meet the size criteria, but were included at the time due to their proximity to the wilderness and the known administrative concerns which made them logical inclusions.

The Lost Water Canyon Recommended Wilderness encompasses 6,800 acres in the Pryor Mountains on the Beartooth Ranger District. The area features a deep canyon with limited access opportunities due to the steep canyon walls. The area is virtually unaltered by man's activities. It lies within the Pryor Mountains which is a unique, unglaciated island above the prairie and is largely composed of limestone. There is little surface water and Douglas-fir is the dominant tree species. A research natural area lies within this management area and will be included in the research natural area discussion.

Forest Plan Eligible Wild and Scenic Rivers

The National Wild and Scenic Rivers System Act of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) was enacted to preserve rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is recognized for safeguarding the special character of these rivers, while also allowing for their appropriate use and development. The Act promotes river management across political boundaries and public participation in developing goals for river protection.

Wild and scenic river designated management boundaries generally average 0.25 mile on either bank in the lower 48 United States. The purpose of this management corridor is to protect river-related values. For management purposes, river segments are classified as wild, scenic, or recreational.

- Wild River Areas: Those rivers or sections of rivers that are free of impoundments and generally
 inaccessible except by trail, with watersheds or shorelines essentially primitive and waters
 unpolluted. These represent vestiges of primitive America.
- Scenic River Areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- Recreational River Areas: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Each river in the national system is administered with the goal of protecting and enhancing the outstanding remarkable values for which it was designated. Recreation, agricultural practices, transportation development, and other uses may generally continue after designation.

Assessment - Draft Existing Designated Areas Report

Table 4 shows the currently eligible rivers on the Custer Gallatin, their approximate mileage and the potential classification, and the outstandingly remarkable values identified in the forest plans. All of the rivers are found in the Madison, Henrys, Gallatin, Absaroka and Beartooth Mountains portion of the Custer Gallatin with the exception of Crooked Creek, which is located in the Pryors.

Table 4. Forest plan eligible rivers

River/Creek	Miles	Potential Designation	Outstandingly Remarkable Values
Madison River	9	Recreation	Geologic, scenic, fisheries
Gallatin River	39	Recreation	Scenic, recreation, fisheries
Yellowstone River	17	Recreation	Scenic, recreation
Clarks Fork Yellowstone	2	Wild	Scenic, recreation
Boulder River	19	Recreation	Geologic, recreation, scenic
	9	Scenic	
Stillwater River	7	Recreation	Fisheries, recreation, scenic
	20	Wild	
West Rosebud Creek	8	Wild	Geologic, recreation, scenic
East Rosebud Creek	7	Recreation	Geologic, recreation, scenic
	13	Wild	
West Fork Rock Creek	10	Recreation	Fisheries, geologic, recreation
	10	Wild	
Lake Fork Rock Creek	2	Recreation	Geologic, scenic
	8	Wild	
Rock Creek	13	Recreation	Geologic, recreation
	3	Wild	
Crooked Creek	8	Wild	Cultural, fisheries, geologic, scenic

Note: Entire length included miles in wilderness/segment designations displayed on GIS maps.

The 1987 Gallatin Forest Plan found four river segments (the Madison, Gallatin, Yellowstone, and Boulder Rivers) to be eligible through an interdisciplinary team evaluation of all the streams and rivers within the Gallatin National Forest. These eligible river segments were all identified as potential recreation rivers because of the presence of major highways, county roads, recreational developments, and other developments paralleling the river segment. In all four cases, the river channels are free of major man-made impoundments, diversions, rip rap, or channel modifications. However, some minor channel modifications are present on all river segments.

Gallatin Plan Amendment #12 added the Clarks Fork of the Yellowstone River from the bridge crossing at the Clarks Fork Trailhead to the national forest boundary as an eligible wild river. Amendment 12 also modified the descriptions of the Boulder River to highlight the river values that support their classification as eligible for wild and scenic river designation.

The remainder of the streams and rivers on the Gallatin National Forest were found, in many cases, to support important fishery or wildlife values, to be unique, scenic, and to provide a wide range of recreation opportunities. However, they were not considered to have outstandingly remarkable values as described in the Act.

The Custer Forest Plan identified four rivers as eligible and assigned a potential classification for each river. Those four rivers are the Little Missouri, Rock Creek, West Fork Rock Creek, and the Stillwater. The Little Missouri is no longer administered by the Custer National Forest, but is administered by the Dakota Prairie Grasslands.

Shortly after the signing of the record of decision, the Custer reevaluated the streams on the national forest for potential wild and scenic eligibility, because the original analysis did not fully consider the inclusion of other rivers that may have had recreation, wild, or scenic outstandingly remarkable values.

Assessment - Draft Existing Designated Areas Report

This analysis identified four additional rivers for wild and scenic eligibility. The results of that assessment were codified in Amendment #2 to the Custer Forest Plan in 1989. Amendment #2 identified potential classification and outstandingly remarkable values for the various stream segments, and established forest plan standards to protect streams that are eligible for future considerations and provided interim management direction for the identified streams.

The four additional rivers identified were the East Rosebud, Lake Fork Rock Creek, West Rosebud Creek, and Crooked Creek-Lost Water Canyon. Potential classifications and outstandingly remarkable values for all seven rivers are listed in

Table 4. All of the rivers with the exception of Crooked Creek include segments within wilderness that were recommended for a potential wild classification. The non-wilderness segments were recommended for recreation classification; the outstandingly remarkable values within and outside of wilderness do not change.

Trends and Drivers

Trends within recommended wilderness are somewhat similar to designated wilderness when it comes to human and environmental pressure. The areas fall along a spectrum of recreational use, with individual wilderness characteristics, key features, and manageability.

However, consistent with the forest plans and travel plan some of these areas have allowable ongoing motorized or mechanized use and commercial uses such as outfitting and guiding or commercial filming. Others have received little to no use, such as Lost Water Canyon in the Pryors. Mountain bike and motorized users have identified many of these areas, such as Lionhead, as important locations to consider for non-wilderness-based recreational pursuits. Conversely, many wilderness and quiet users have also identified these areas as natural priorities for addition to the National Wilderness Preservation System. While the forest plan will not address route- or area-specific travel designations, the broad stage set for management of these areas during revision may help clarify future travel conversations.

Many of the eligible rivers have potential classifications of recreation and are heavily used for recreational purposes. The Recreation Settings, Opportunities and Access report (Oswald 2017) outlines use, patterns, and trends associated with recreation. The draw of recreationists to water to experience challenge, view scenery, relax, fish or any combination of lifestyle and recreational endeavors is worth noting. Currently, many of the rivers have commercial operators that provide guided fishing, rafting, paddling or other services. As discussed in Oswald (2017) guided boating and rafting is one of the most widely permitted outfitter activities in regards to user days on the Custer Gallatin.

Some of the eligible rivers are adjacent to major roadways, communities, and infrastructure such as powerlines. As those communities encroach on the river corridors, municipal projects, special use authorizations, and other safety-related projects have increased.

Rivers are a somewhat unique resource in that they can be accessed from many locations including the National Park, BLM, state and private lands. The Forest Service role in river management beyond recreations and access points is discussed in the watershed and fisheries report.

Discussions of biophysical trends and drivers are found in the Watershed and Fisheries reports. Social trends and drivers associated with recreation are included in that discussion.

Key Benefits to People

See also the "Wilderness" discussion of this report, the Recreation Settings, Opportunities and Access report (Oswald 2017), the Aquatic and Riparian Ecosystems report (Barndt et al. 2017), the Cultural and Historic Resources and Uses report (LaPoint and Bergstrom 2017) and the Scenery report (Ruchman 2017).

Information Needs

Additional information regarding the processes, definitions, and potential eligible rivers on our neighboring forests and Federal lands is needed.

Key Findings

The inventory and evaluation of additional areas for recommended wilderness and for eligible wild and scenic rivers are stand-alone processes that will meet all current law, policy, and regulation. The evaluation processes have not been fully developed, but will consider how to best inventory and evaluate future recommended wilderness potential eligible rivers classifications.

The selected criteria and methodology will primarily use existing information, but site-specific information gaps could be identified. In anticipation of this evaluation there is some ongoing data collection on the Custer Gallatin that may help inform individual areas characteristics.

Travel Ways: National Designated Trails and the Beartooth Highway

Introduction

The National Trails System Act (Public Law 90-543) became law on October 2, 1968. The purpose of the act was "to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation." This act authorized three types of trails: (1) national scenic trails, (2) national recreation trails, and (3) connecting-and-side trails. In 1978 national historic trails were also added to the national trail system. While national scenic trails and national historic trails may only be designated by Congress, national recreation trails may be designated by the regional forester on Forest Service lands to recognize exemplary trails of local and regional significance in response to an application from the trails managing agency or organization. Through designation, these trails are recognized as part of America's National Trail System.

Current Forest Plan Direction

The Gallatin Forest Plan provided direction to manage the Continental Divide Trail in accordance with the Continental Divide Trail Comprehensive Management Plan and to manage national recreation trails to provide visitors with a wide variety of recreational experiences. The Plan proposed the evaluation of some trails for potential designation but a comprehensive evaluation has not been completed.

There is no specific direction in the Custer or Gallatin Forest Plans for management of the Beartooth Highway Scenic Byway or All-American Road resource. The Custer and Gallatin National Forests have developed plans that establish goals, objectives, and standards for management of all forest resources within the corridor on the national forest. The Corridor Management Plan articulates a vision of the communities for the scenic byway and represents a commitment to conserve and enhance its intrinsic qualities. It specifies the actions, procedures, operational and administrative practices, and strategies to maintain the natural, scenic, recreational, historic, cultural, and archaeological qualities of the byway corridor while recognizing the primary transportation role of the highway.

The Corridor Management Plan is a working document; therefore, it will be continually reviewed and revised as new information arises. The Corridor Management Plan is intended to be secondary but consistent with National Forest Land Management Plan direction.

Existing Condition

The Continental Divide National Scenic Trail is managed according to the National Trails Act, the Continental Divide National Scenic Trail Study Reports and Final Environmental Impact Statement, and the Continental Divide National Scenic Trail Comprehensive Plan (as amended) for the purpose of

providing: "A continuous, appealing trail route, designed for the hiker and horseman, but compatible with other land uses" and access for hikers and stock into the diverse country along the Continental Divide in a manner which will assure a high quality recreation experience while maintaining a constant respect for the natural environment.

Approximately 28 miles of the Continental Divide National Scenic Trail is located within the plan area on the Hebgen Ranger District abutting the Caribou-Targhee National Forest. The Continental Divide Trail on the Custer Gallatin is comprised of four trails: Two Top Divide #116, Lionhead Mountain Continental Divide National Scenic Trail #115, Mile Creek #214, and Mile Creek Face #219.

The Custer Gallatin National Forest has 12 national recreation trails designated by the regional forester as part of the national system of trails authorized by the National Trails Systems Act. National recreation trails provide a variety of outdoor recreation uses. Table 5 displays the trails by area, name, and mileage on the national forest.

Table 5. Custer Gallatin national recreation trails

Trail Name	Rounded Miles
Madison, Henrys Lake, Gallatin and Absaroka Beartooth Mountains	
Basin Lakes National Recreation Trail	4.00
Big Sky Snowmobile Trail National Recreation Trail	55.00
Boulder River Natural Bridge National Recreation Trail	0.25
Gallatin Riverside National Recreation Trail	2.50
Garnet Mountain National Recreation Trail	4.00
Palisade Falls National Recreation Trail	0.60
Parkside Ski Touring National Recreation Trail	2.50
Refuge Point X-C Ski National Recreation Trail	5.00
Silver Run Ski Touring National Recreation Trail	5.00
Two Top Snowmobile National Recreation Trail	28.00
Wild Bill's Lake National Recreation Trail	0.50
Bridger, Bangtail, and Crazy Mountains ¹	
Bridger Foothills Trail National Recreation Trail	20.00
Grand Total	73.00

Note: Mileage taken from more accurate and updated infra trail layers may be slightly different than forest plan or designated miles.

A small piece of the U.S. Fish and Wildlife Service-managed Drinking Horse Trail crosses the national forest for less than 100 feet.

Designated by Congress in 1986, the entire Nez Perce National Historic Trail stretches 1,170 miles from the Wallowa Valley of eastern Oregon to the plains of north-central Montana. The trail includes a designated corridor encompassing 4,161 miles of roads, trails, and routes. The auto route consists of three-season, all-weather roadways ranging from high-standard gravel segments to portions of Interstate 15 and 90. Nez Perce National Historic Trail signs have been erected along the primary auto route and two alternate segments.

The Nez Perce Auto Route on the Custer Gallatin can be found in two locations. The first section follows State Highway 20 from Targhee Pass to Yellowstone National Park, accounting for approximately 8 miles of the segment from Leadore and Island Park to Yellowstone. The second section follows State Highway 212, from the Northeast Entrance of Yellowstone National Park, for approximately 8 miles, through Cooke City where it leaves the Custer Gallatin. Auto tour guide pamphlets with maps and graphics have been developed for all eight segments of the Nez Perce (Nee-Me-Poo) National Historic Trail.

The 67-mile Beartooth Highway (U.S. 212) starts at the Yellowstone National Park boundary in Montana, extends southeast into Wyoming, then ascends northeast toward the town of Red Lodge, Montana. The Beartooth Highway is situated in an area rich in scenic, natural, cultural, historic, and recreational opportunities, and is one of the most popular Northeast Yellowstone Scenic Corridors.

The Beartooth All-American Road is the highest elevation highway in Wyoming (10,947 feet) and Montana (10,350 feet), and is the highest elevation highway in the Northern Rockies. It is heralded as one of the most scenic drives in the United States. The route features breathtaking views of the Absaroka and Beartooth Mountains, and open high alpine plateaus dotted with countless glacial lakes, forested valleys, waterfalls and wildlife. Surrounded by national forest and wilderness, visitors to the Beartooth All-American Road are provided the unique opportunity to witness and explore pristine, untouched alpine and montane landscapes. Visitors in the Beartooth Corridor have ample access to recreation. Visitors can access skiing, hiking, wildlife viewing, fishing, camping and snowmobiling in winter.

In 1931, congress passed the Park Approach Act, which authorized the Secretary of the Interior to approve and construct national approach highways. The Beartooth Highway is the only road constructed under this Act.

Since its completion in 1936, the highway has provided millions of visitors a rare opportunity to see the transition from a lush forest ecosystem to alpine tundra in the space of just a few miles. The Beartooth Corridor is one of the highest and most rugged areas in the lower 48 states, with 20 peaks reaching over 12,000 feet in elevation. In the surrounding mountains, glaciers are found on the north flank of nearly every mountain peak over 11,500 feet high.

The Beartooth Highway is governed by a comprehensive road corridor management plan that includes the 53-mile Beartooth All-American Road, the Beartooth Highway National Forest Scenic Byway, and undesignated portions of the route.

The Beartooth Corridor is primarily rural and is managed by the Custer Gallatin National Forest and the Shoshone National Forest. The land is managed for a variety of uses, but primarily for recreation and wildlife habitat. Much of the Beartooth Highway is protected from development by a 250-foot withdrawal on each side of the road. Under Executive Order 5949, the corridor was withdrawn from settlement, location, sale, entry, or other disposal and was reserved for park approach road purposes.

Trends and Drivers

The Continental Divide Trail is seen as a stand-alone resource and opportunity that attracts visitors to the national forest for the purpose of hiking the trail.

National recreation trails benefit from the prestige and increased visibility of being a part of the National Trail System. National recreation trails can often compete well for additional funding or state/Federal grant opportunities.

National trails systems and sustainable trails have been an increased focus of the agency, partners, and the public. National trail systems are one of the focus areas for connecting the public with their national forest.

The Beartooth Highway generally receives the highest levels of vehicle traffic between Cooke City and the intersection of the U.S. 212 and Wyoming 296. This can be attributed to the convergence of travelers from both Red Lodge, Montana, via U.S. 212 and from Cody, Wyoming, via WY 296 west of the intersection of the two highways. Highest use is in August.

The Recreation Settings, Opportunities and Access report (Oswald 2017) identifies trends in visitation and driving for pleasure, viewing wildlife and viewing natural features.

Key Benefits to People

The National Recreation Trails Program supports designated national recreation trails with an array of benefits, including promotion, technical assistance, networking, and access to funding. Its goal is to promote the use and care of existing trails and stimulate the development of new trails to create a national network of trails and realize the vision of "Trails for All Americans."

National recreation trails provide for numerous outdoor recreation activities in a variety of urban, rural, and remote areas. Over 1,000 trails in all 50 states, available for public use and ranging from less than a mile to 485 miles in length, have been designated as national recreation trails on Federal, state, municipal, and privately owned lands.

The Continental Divide National Scenic Trail provides for high-quality scenic, primitive hiking and horseback riding opportunities in the context of conserving the natural, historic, and cultural resources along its corridor.

All-American road recognition carries with it not only a heightened awareness of the highway route as one of the premier destination roads in the U.S., but also recognition of the agencies, organizations, and communities that sought designation. All-American road designation will help to expand the number and types of partnerships that are formed. These partnerships may extend beyond Montana or Wyoming. All-American road designation serves to heighten local pride among communities situated at either end of the corridor and encourage the preservation of the many scenic, recreation, and historic resources that attract visitors.

All-American road designation will help the Beartooth Highway receive a higher priority ranking for potential funds from Federal Highway Administration—National Scenic Byway Discretionary Funds and other funding sources. These funds could be used to enhance interpretive facilities, information kiosks, restroom facilities, and other needed byway improvements.

Information Needs

Updated trail condition survey information.

Key Findings

A comprehensive look at national recreation trails would be valuable to help clearly identify and articulate what trails on the Custer Gallatin National Forest would be best included in the system.

Nationally designated trails can help provide focus and commitments of resources in the context of a Custer Gallatin sustainable trails program.

The Custer Gallatin may consider developing management direction for the Beartooth Highway National Forest Scenic Byway and All-American Road consistent with the corridor management plan and the purposes of the designations to enhance or preserve the qualities for which it was designated.

National Natural Landmarks and Special Geologic Area

Introduction

The National Natural Landmarks Program was established in 1962 by administrative action relying on authority provided by the Historic Sites Act of 1935. Three other laws subsequently referenced the program. The first national natural landmarks were designated by the Secretary of the Interior in 1964.

The goals of the National Natural Landmarks Program are to encourage the preservation of sites illustrating the geological and ecological character of the United States, to enhance the scientific and educational value of sites thus preserved, to strengthen public appreciation of natural history, and to foster a greater concern for the conservation of the nation's natural heritage.

There are 10 national natural landmark sites within the state of Montana, and 13 national natural landmark sites located entirely or partially within the state of South Dakota.

Current Forest Plan Direction

There is currently no Gallatin Forest Plan direction that speaks to the management of national natural landmarks. The Custer Forest Plan provides direction to protect the unique geological and scenic features of the national natural landmarks and to provide a recreation opportunity.

Existing Condition

Three national natural landmarks are located on the Custer Gallatin: Capital Rock and the Castles National Natural Landmarks on the Sioux District, and Middle Fork Canyon National Natural Landmark in the Bridger Mountains. Detailed information about these areas, including benefits, can also be found in the Renewable and Nonrenewable Energy and Mineral Resources report (Pierson 2017).

The Middle Fork Canyon National Natural Landmark includes 960 acres and was designated in 1977. The national natural landmark illustrates rocks deformed by the Earth's tectonic movement. It is an outstanding example of a canyon cut across the grain of the geologic structure by a superposed stream. Few places more clearly illustrate the effects of erosion and stream superposition.

The Capital Rock National Natural Landmark includes 244 acres and was designated in 1976 for uniqueness of geologic formation due to uplift and erosion within the surrounding prairie environment.

The area is a remnant of the once continuous blanket of Tertiary deposits that covered much of the Great Plains. Late Cretaceous, Paleocene, Oligocene, and Miocene strata are well displayed.

The Castles National Natural Landmark on the Sioux Ranger District includes 987 acres and was designated in 1976 for the area's uniqueness of geologic formation due to uplift and erosion within the surrounding prairie environment. Steep-walled, flat-topped buttes standing 200 to 400 feet above the surrounding prairie, the Castles contains exposed rock of Upper Cretaceous, Paleocene, Oligocene, and Miocene Ages. Cretaceous and Tertiary beds contain a variety of flora and fauna fossils.

The Madison River Canyon Earthquake Area is a 37,800-acre geological area, designated under the authority of the Secretary of Agriculture as a special geological area in 1960. The area was intended to allow the natural processes in this area to continue while providing for its use in conjunction with the safety and enjoyment of visitors. The Earthquake Lake Visitor Center, constructed in 1967 is principal in meeting the purposes of the designation to interpret and provide education about the 1959 earthquake, related events, and national forest resource management. The visitor center is further discussed in the Recreation Settings, Opportunities and Access report (Oswald 2017).

Trends and Drivers

Please refer to the Renewable and Nonrenewable Energy and Mineral Resources report (Pierson 2017).

Key Benefits to People

Please refer to the Renewable and Nonrenewable Energy and Mineral Resources report (Pierson 2017).

Information Needs

Please refer to the Renewable and Nonrenewable Energy and Mineral Resources report (Pierson 2017).

Key Findings

Management direction for the three national natural landmarks should be incorporated into the new plan. No direction currently exists in the Gallatin Forest Plan.

Please refer to the Renewable and Nonrenewable Energy and Mineral Resources report (Pierson 2017).

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